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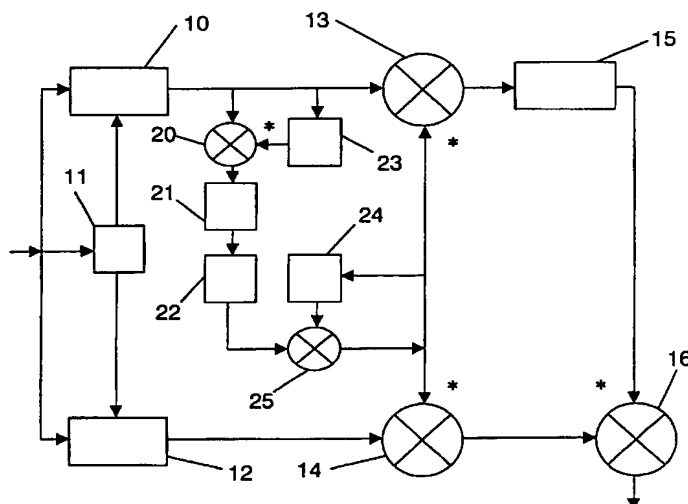
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[Continued on next page]

(54) Title: RAKE RECEIVER WITH INDIVIDUAL FINGER COMPENSATOR(S)



(57) Abstract: Rake receivers in code division multiple access (CDMA) telecommunication comprise fingers (1,2,3) with each finger processing signal components for a particular transmission path to be able to better synchronize with a RF signal received via different paths, and a combiner (4) for combining the results originating from said fingers, and a compensator in the form of a controlled oscillator in a feedback loop. By locating a finger compensator (20-25) in a finger, said finger can handle complex situations, like Doppler shifts under high-speed conditions. Preferably, most or all fingers each comprise such a finger compensator, in which case said feedback loop can be avoided. Such a finger compensator can be hardware, software or a mixture of both when comprising a filter (21) plus an amplitude normalizer (22) between two arithmetical modules (20,25) for multiplying an input symbol signal with a conjugated previous input symbol signal and an output symbol signal with a previous output symbol signal.

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A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 H04B1/707 H04L27/233

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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, INSPEC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 00 65797 A (QUALCOMM INC) 2 November 2000 (2000-11-02)	1,6-14
Y	page 7, line 12 - page 10, line 30; figure 12 page 11, line 26 - line 34 ---	2-5
X	WO 01 59937 A (QUALCOMM INC) 16 August 2001 (2001-08-16)	1,6-14
Y	page 6, line 14 - line 32 page 9, line 4 - line 34 ---	2-5
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☒ Patent family members are listed in annex.

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